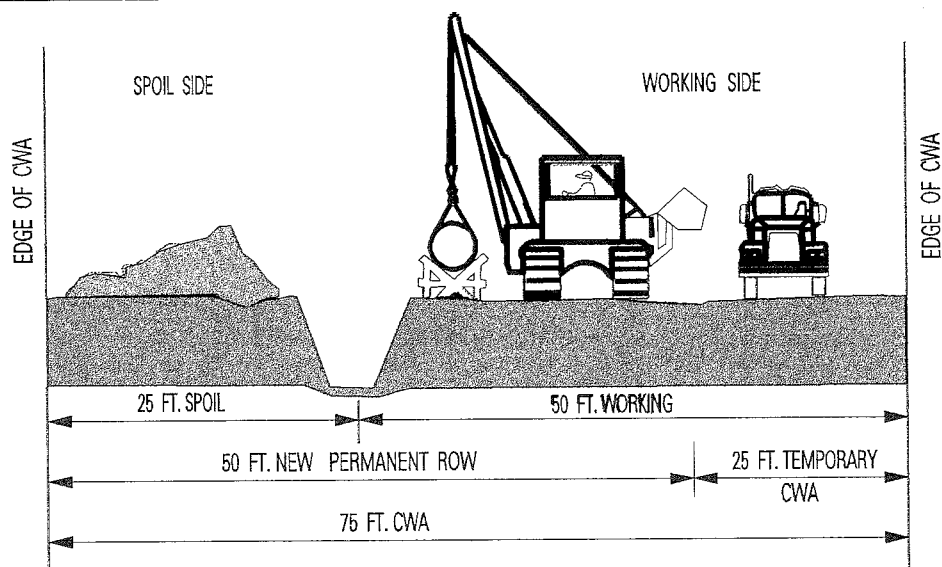


Appendix C

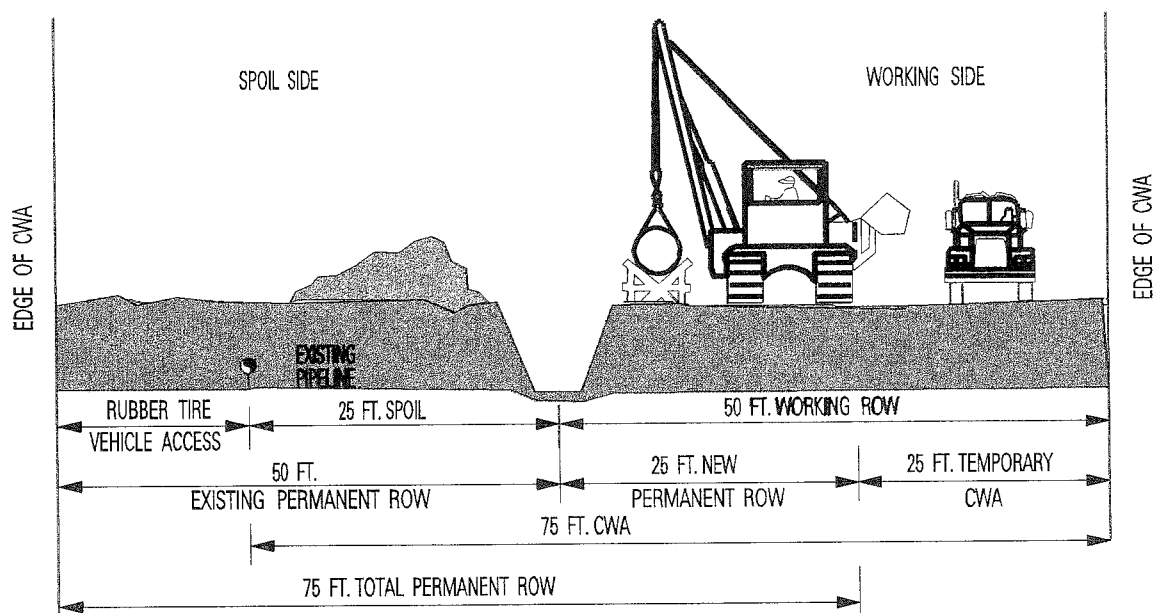
Typical ROW Cross Sections

Appendix C1

Millennium Typical ROW Cross Sections



NEW ROW & LIFT AND LAY



PARALLEL TO EXISTING ROW

NOTES: 1. THE DIMENSIONS SHOWN ON THIS FIGURE ARE TYPICAL, REFER TO CONSTRUCTION ALIGNMENT SHEETS FOR SPECIFIC CWA DIMENSIONS.

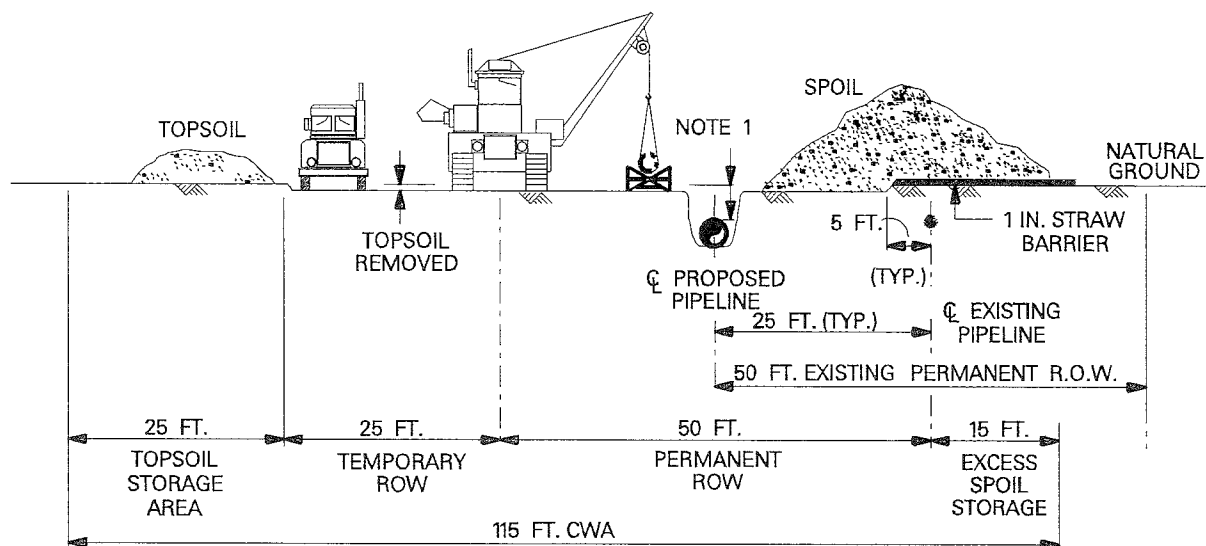
NOT TO SCALE



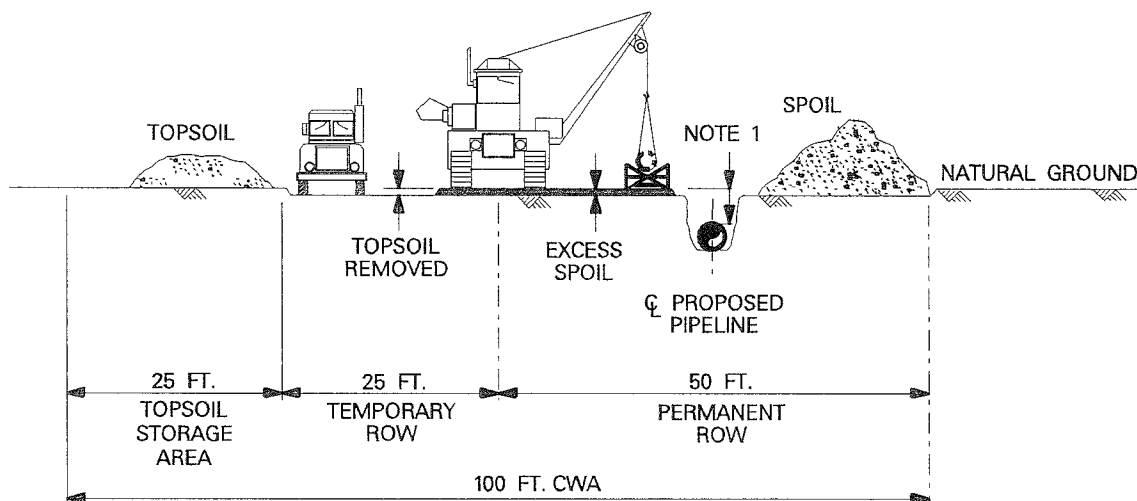
ENVIRONMENTAL CONSTRUCTION STANDARDS

TYPICAL UPLAND
CONSTRUCTION
WORK AREA

FIGURE 2



ADJACENT TO EXISTING PIPELINE WITH GRASS GROUND COVER



LIFT & LAY NEW PIPELINE OR PLOWED FIELD

NOTE:

1. DEPTH OF COVER IN CROPLAND TO BE 4 FT. OR 1 FT. BELOW EXISTING FIELD TILE, WHICH EVER IS GREATER. (FIGURE 17)
2. OTHER CONFIGURATIONS OF TOPSOIL AND SUBSOIL ARE ACCEPTABLE PROVIDED THEY ARE KEPT SEPARATE.
3. UP TO 16 INCHES OF TOPSOIL REMOVED.
4. TOPSOIL AND SUBSOIL PILES WILL BE ADEQUATELY PROTECTED FROM EROSION AND SEDIMENTATION BY USE OF SEDIMENT FILTER DEVICES OR STRAW MULCH.
5. A 1 IN. THICK STRAW VISUAL BARRIER MUST BE INSTALLED PRIOR TO SUBSOIL SPOILING OVER TOPSOIL.

NOT TO SCALE

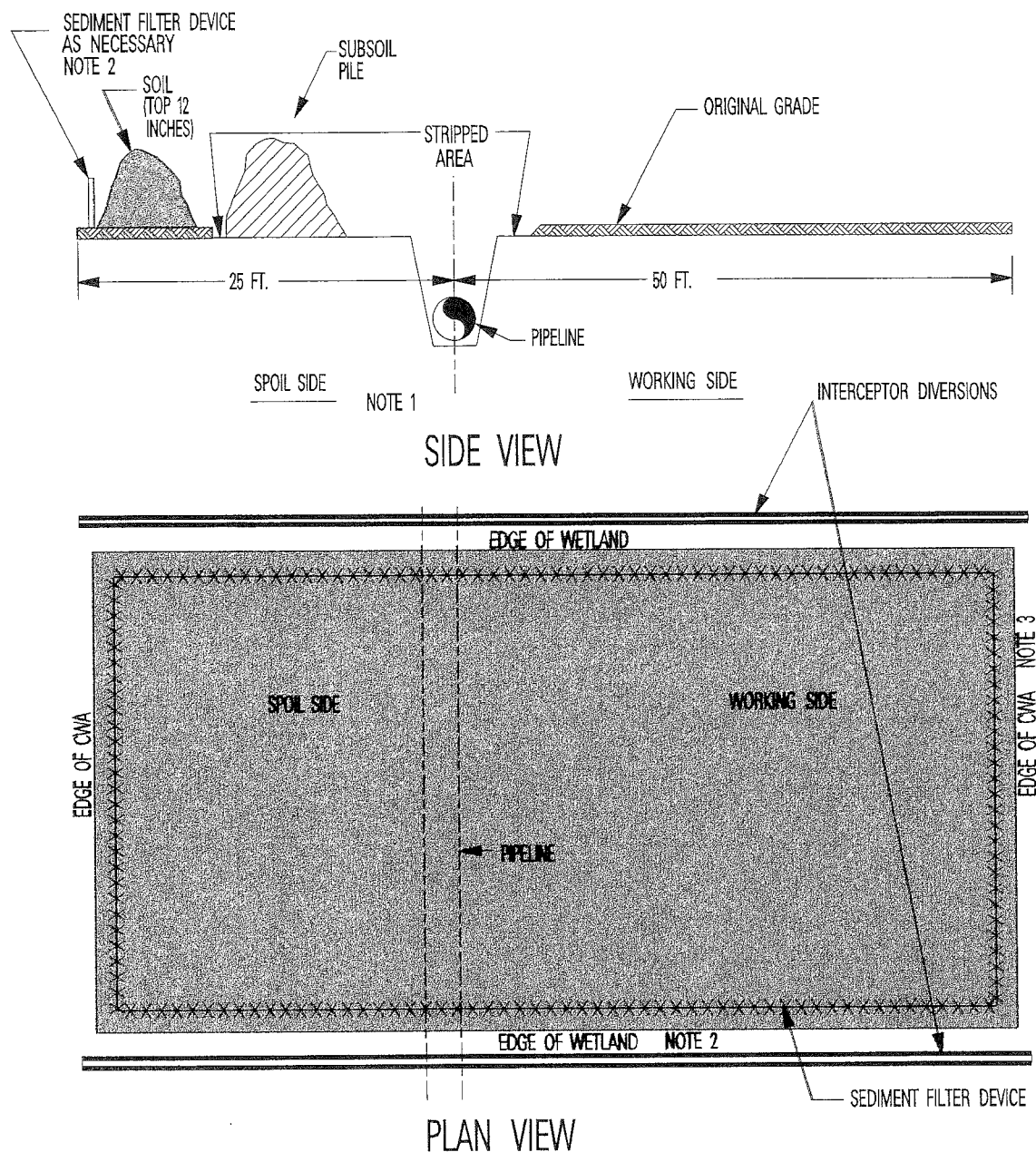


**MILLENNIUM
PIPELINESM**

ENVIRONMENTAL CONSTRUCTION STANDARDS

TYPICAL
TOPSOIL
CONSERVATION
IN AGRICULTURAL LAND

FIGURE 15



- NOTES:
1. IN WETLAND AREAS WHICH CONTAIN NO STANDING WATER OR SATURATED SOILS, SOIL (TOP 12 INCHES) AND SUBSOIL WILL BE STOCKPILED SEPARATELY WITHIN THE WETLAND CWA.
 2. A SEDIMENT FILTER DEVICE WILL BE PLACED ACROSS THE CWA AT THE WETLAND'S EDGE.
 3. A SEDIMENT FILTER DEVICE WILL BE PLACED AT THE EDGE OF THE CWA AND AROUND SOIL AND SUBSOIL PILES AS NECESSARY.

NOT TO SCALE



ENVIRONMENTAL CONSTRUCTION STANDARDS

TYPICAL
WETLAND
CROSSING

FIGURE 24

Appendix C2

Empire Typical ROW Cross Sections

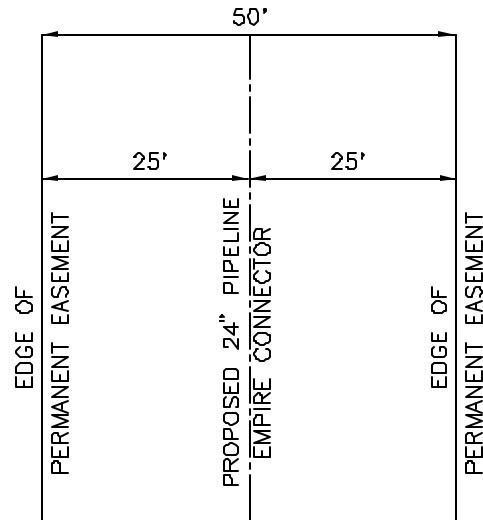


FIGURE 1

TYPICAL R.O.W. — LIFT AND RELAY EXISTING EMPIRE STATE PIPELINE

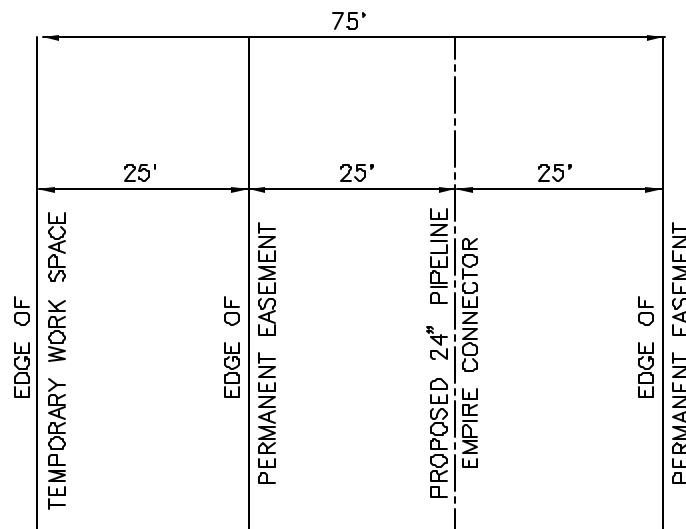


FIGURE 2

TYPICAL R.O.W.


NOTE:

In Agricultural areas and as necessary, 25' of Additional Temporary Workspace width (not shown on these typicals) may be acquired in addition to the 100' shown here, as a contingency along construction Right-of-Way (R.O.W.).

Examples of when this may be necessary include, but are not limited to, the presense of highly saturated soils and areas where blasting is needed.

PUBLIC

DRAWN BY: Caler & Calantonia, Inc.	DATE: February 2005
CHECKED BY: Caler & Calantonia, Inc.	DATE: February 2005
APPROVED BY: Haley & Aldrich, Inc.	DATE:
APPROVED BY: Empire State Pipeline	DATE:

DRAWING NO.	TITLE	File No.: 8X11 ROW DETAIL.DWG
		EMPIRE STATE PIPELINE TYPICAL RIGHT OF WAY STATE OF NEW YORK
		 Empire Pipeline <small>A National Fuel Gas Company</small>
		FERC SUBMITTAL
		EMP-ROW-001

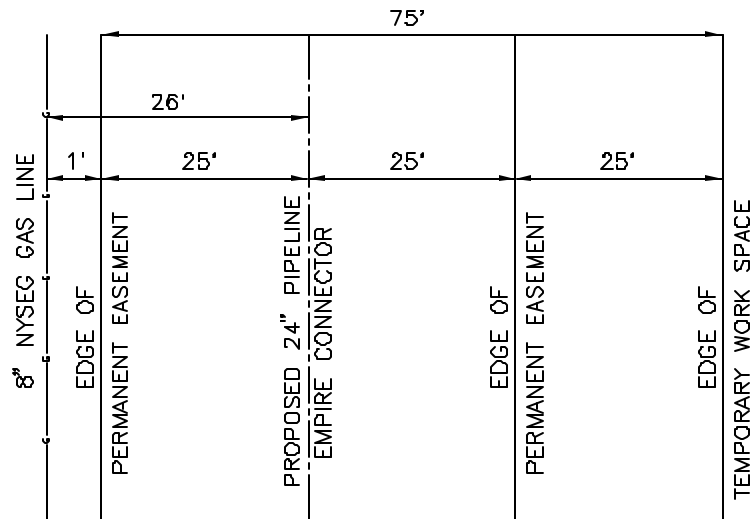


FIGURE 3

TYPICAL R.O.W. ALONG EXISTING 8" NYSEG PIPELINE

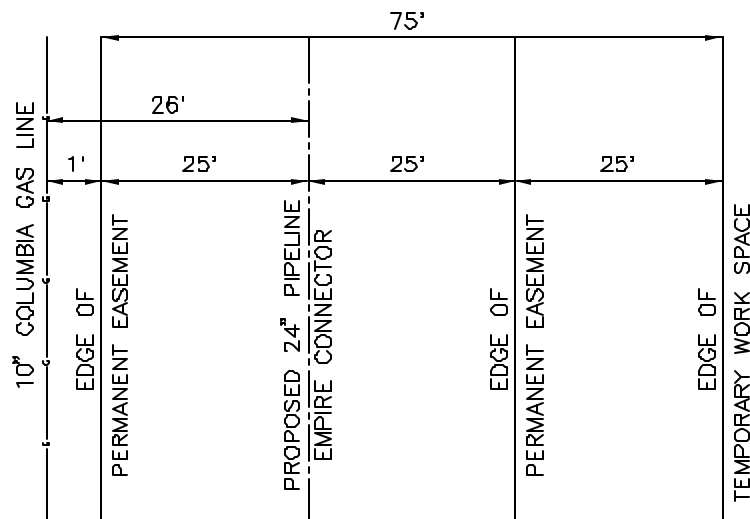


FIGURE 4

TYPICAL R.O.W. ALONG EXISTING 10" COLUMBIA PIPELINE


NOTE:

In Agricultural areas and as necessary, 25' of Additional Temporary Workspace width (not shown on these typicals) may be acquired in addition to the 100' shown here, as a contingency along construction Right-of-Way (R.O.W.).

Examples of when this may be necessary include, but are not limited to, the presense of highly saturated soils and areas where blasting is needed.

PUBLIC

DRAWN BY: Caler & Calantonia, Inc.	DATE: February 2005
CHECKED BY: Caler & Calantonia, Inc.	DATE: February 2005
APPROVED BY: Haley & Aldrich, Inc.	DATE:
APPROVED BY: Empire State Pipeline	DATE:

DRAWING NO.	TITLE	File No.: 8X11 ROW DETAIL.DWG
		EMPIRE STATE PIPELINE TYPICAL RIGHT OF WAY STATE OF NEW YORK
		 Empire Pipeline <small>A National Fuel Gas Company</small>
		FERC SUBMITTAL
		EMP-ROW-002

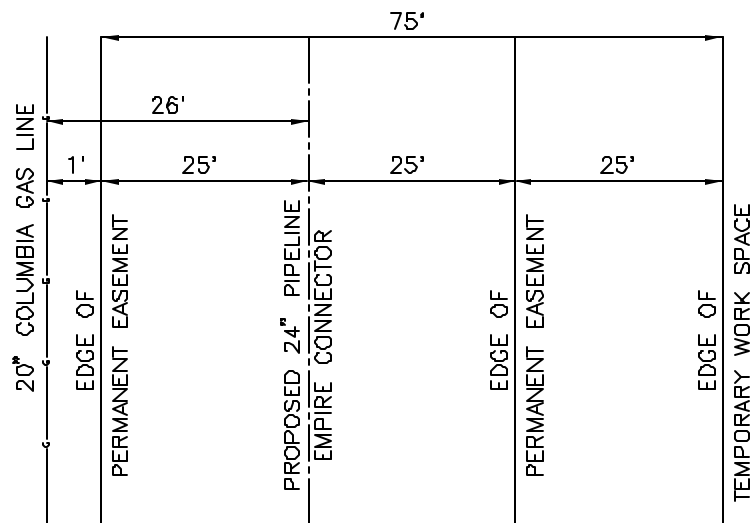


FIGURE 5

TYPICAL R.O.W. ALONG EXISTING 20" COLUMBIA PIPELINE

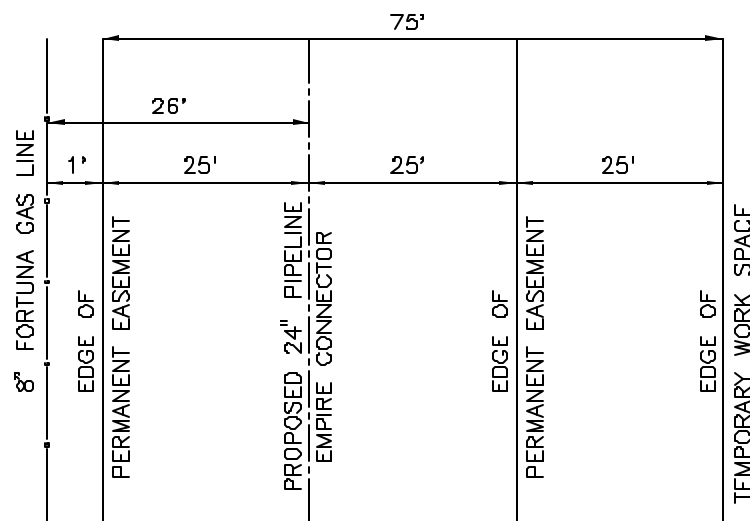


FIGURE 6

TYPICAL R.O.W. ALONG EXISTING 8" FORTUNA PIPELINE


NOTE:

In Agricultural areas and as necessary, 25' of Additional Temporary Workspace width (not shown on these typicals) may be acquired in addition to the 100' shown here, as a contingency along construction Right-of-Way (R.O.W.).

Examples of when this may be necessary include, but are not limited to, the presense of highly saturated soils and areas where blasting is needed.

PUBLIC

DRAWN BY: Caler & Calantonia, Inc.	DATE: February 2005
CHECKED BY: Caler & Calantonia, Inc.	DATE: February 2005
APPROVED BY: Haley & Aldrich, Inc.	DATE:
APPROVED BY: Empire State Pipeline	DATE:

DRAWING NO.	TITLE	File No.: 8X11 ROW DETAIL.DWG	
		EMPIRE STATE PIPELINE TYPICAL RIGHT OF WAY STATE OF NEW YORK	 Empire Pipeline <small>A National Fuel Gas Company</small>
			FERC SUBMITTAL
			EMP-ROW-003

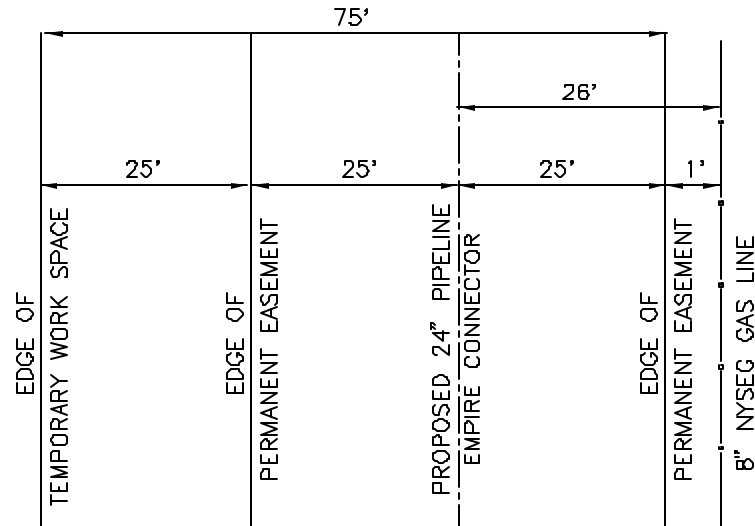


FIGURE 7

TYPICAL R.O.W. ALONG EXISTING 8" NYSEG PIPELINE

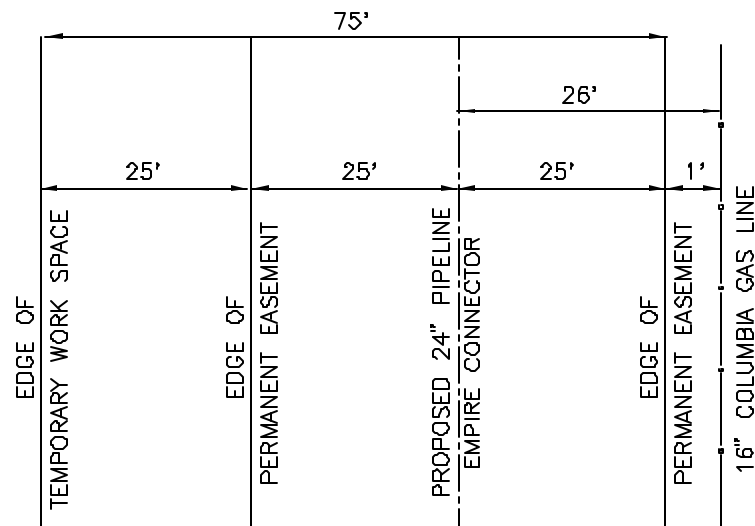


FIGURE 8

TYPICAL R.O.W. ALONG EXISTING 16" COLUMBIA PIPELINE

NOTE:

In Agricultural areas and as necessary, 25' of Additional Temporary Workspace width (not shown on these typicals) may be acquired in addition to the 100' shown here, as a contingency along construction Right-of-Way (R.O.W.).

Examples of when this may be necessary include, but are not limited to, the presense of highly saturated soils and areas where blasting is needed.

PUBLIC

DRAWN BY: Caler & Calantonia, Inc.	DATE: February 2005
CHECKED BY: Caler & Calantonia, Inc.	DATE: February 2005
APPROVED BY: Haley & Aldrich, Inc.	DATE:
APPROVED BY: Empire State Pipeline	DATE:

DRAWING NO.	TITLE	File No.: 8X11 ROW DETAIL.DWG	
		EMPIRE STATE PIPELINE TYPICAL RIGHT OF WAY STATE OF NEW YORK	
			FERC SUBMITTAL EMP-ROW-004

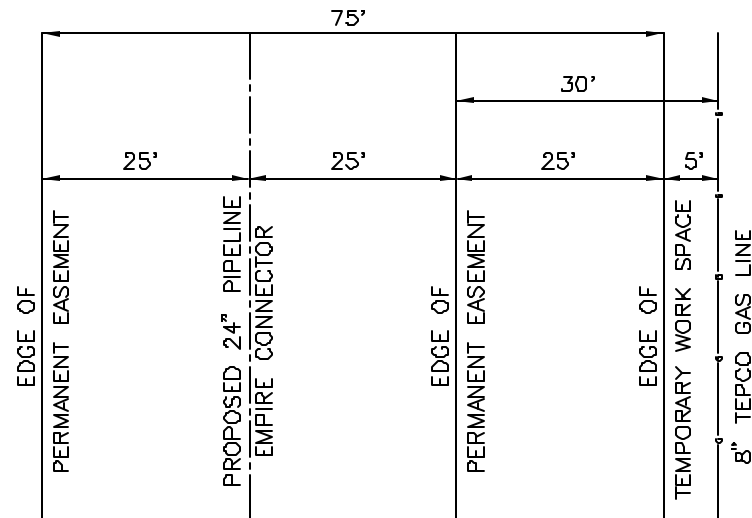


FIGURE 9

TYPICAL R.O.W. ALONG EXISTING 8" TEPCO PIPELINE

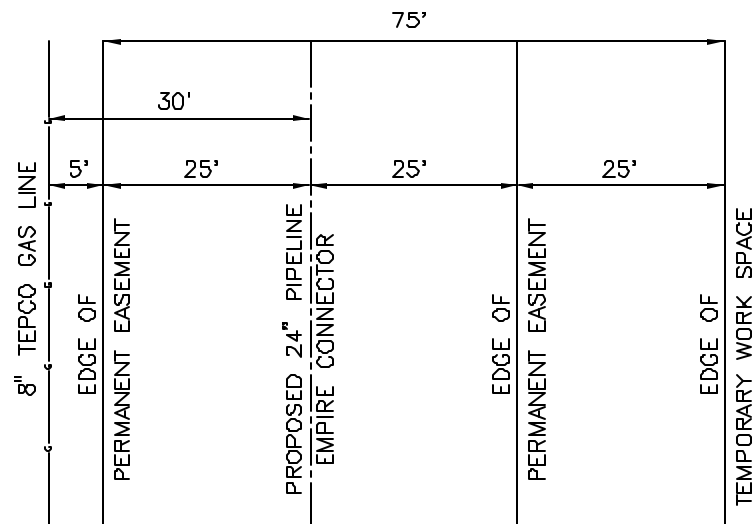


FIGURE 10

TYPICAL R.O.W. ALONG EXISTING 8" TEPCO PIPELINE


NOTE:

In Agricultural areas and as necessary, 25' of Additional Temporary Workspace width (not shown on these typicals) may be acquired in addition to the 100' shown here, as a contingency along construction Right-of-Way (R.O.W.).

Examples of when this may be necessary include, but are not limited to, the presense of highly saturated soils and areas where blasting is needed.

PUBLIC

DRAWN BY: Caler & Calantonia, Inc.	DATE: February 2005
CHECKED BY: Caler & Calantonia, Inc.	DATE: February 2005
APPROVED BY: Haley & Aldrich, Inc.	DATE:
APPROVED BY: Empire State Pipeline	DATE:

DRAWING NO.	TITLE	File No.: 8X11 ROW DETAIL.DWG
		EMPIRE STATE PIPELINE TYPICAL RIGHT OF WAY STATE OF NEW YORK
		 Empire Pipeline <small>A National Fuel Gas Company</small>
		FERC SUBMITTAL
		EMP-ROW-005

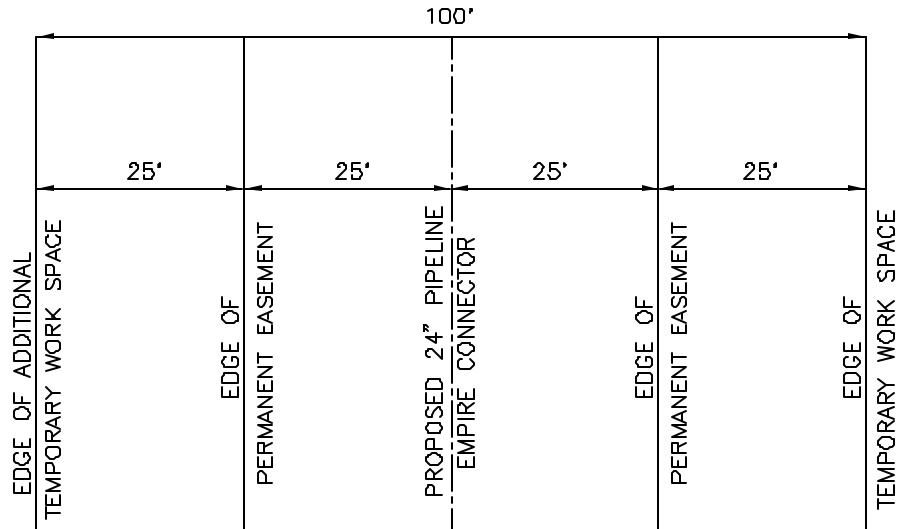


FIGURE 11

TYPICAL AGRICULTURAL R.O.W.

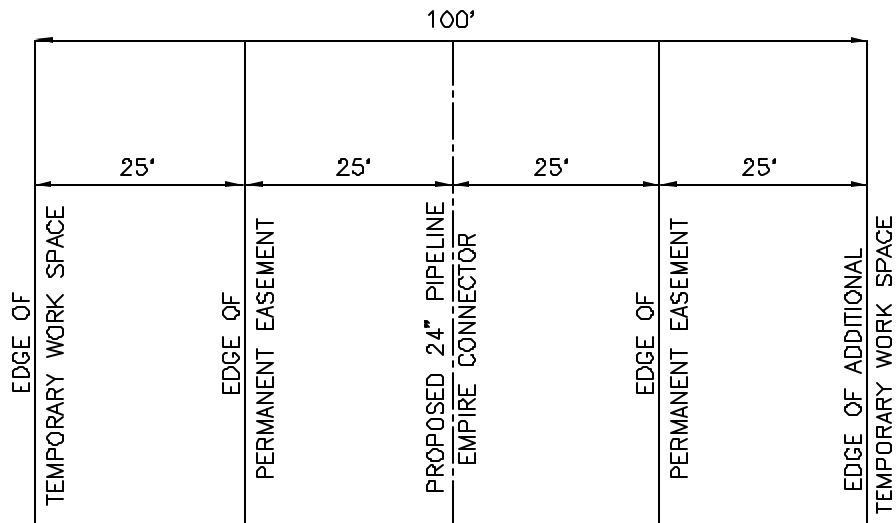


FIGURE 12

TYPICAL AGRICULTURAL R.O.W.

NOTE:

In Agricultural areas and as necessary, 25' of Additional Temporary Workspace width (not shown on these typicals) may be acquired in addition to the 100' shown here, as a contingency along construction Right-of-Way (R.O.W.).

Examples of when this may be necessary include, but are not limited to, the presense of highly saturated soils and areas where blasting is needed.

PUBLIC

DRAWN BY: Caler & Calantonia, Inc.	DATE: February 2005
CHECKED BY: Caler & Calantonia, Inc.	DATE: February 2005
APPROVED BY: Haley & Aldrich, Inc.	DATE:
APPROVED BY: Empire State Pipeline	DATE:


DRAWING NO.	TITLE	File No.: 8X11 ROW DETAIL.DWG
		EMPIRE STATE PIPELINE
		TYPICAL RIGHT OF WAY
		STATE OF NEW YORK
		 Empire Pipeline <small>A National Fuel Gas Company</small>
		FERC SUBMITTAL
		EMP-ROW-006

FIGURE 1.3-6

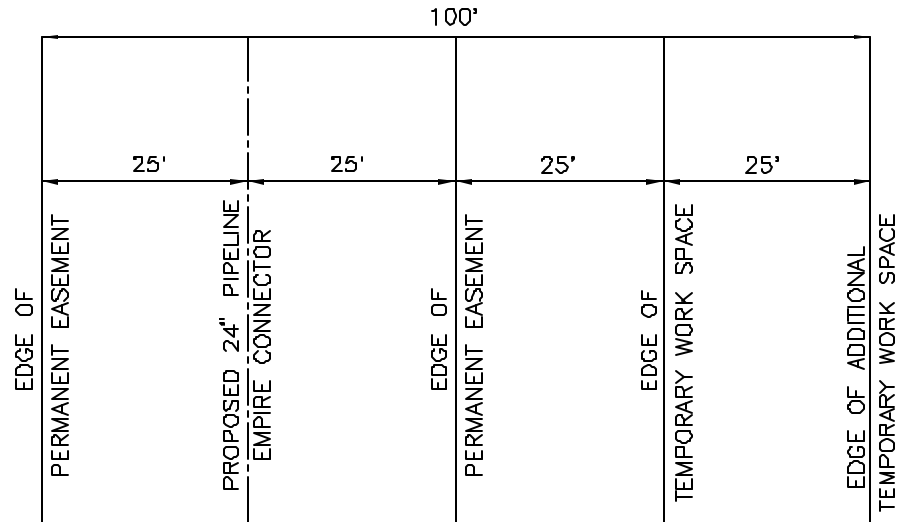


FIGURE 13

TYPICAL AGRICULTURAL R.O.W.

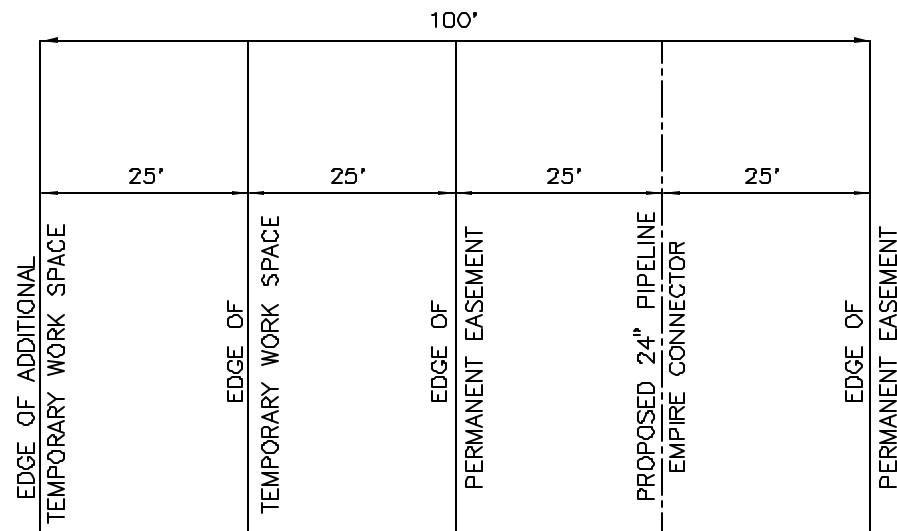


FIGURE 14

TYPICAL AGRICULTURAL R.O.W.

NOTE:

In Agricultural areas and as necessary, 25' of Additional Temporary Workspace width (not shown on these typicals) may be acquired in addition to the 100' shown here, as a contingency along construction Right-of-Way (R.O.W.).

Examples of when this may be necessary include, but are not limited to, the presense of highly saturated soils and areas where blasting is needed.

PUBLIC

DRAWN BY: Caler & Calantonia, Inc.	DATE: February 2005
CHECKED BY: Caler & Calantonia, Inc.	DATE: February 2005
APPROVED BY: Haley & Aldrich, Inc.	DATE:
APPROVED BY: Empire State Pipeline	DATE:

DRAWING NO.	TITLE	File No.: 8X11 ROW DETAIL.DWG
		EMPIRE STATE PIPELINE
		TYPICAL RIGHT OF WAY
		STATE OF NEW YORK
		EMP-ROW-007
		FERC SUBMITTAL



FERC SUBMITTAL

EMP-ROW-007

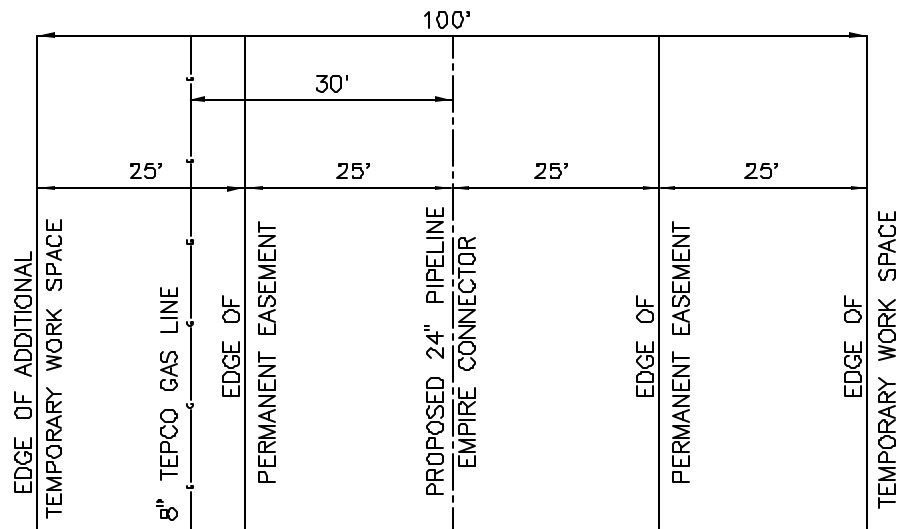


FIGURE 15

TYPICAL AGRICULTURAL R.O.W. ALONG EXISTING 8" TEPCO PIPELINE

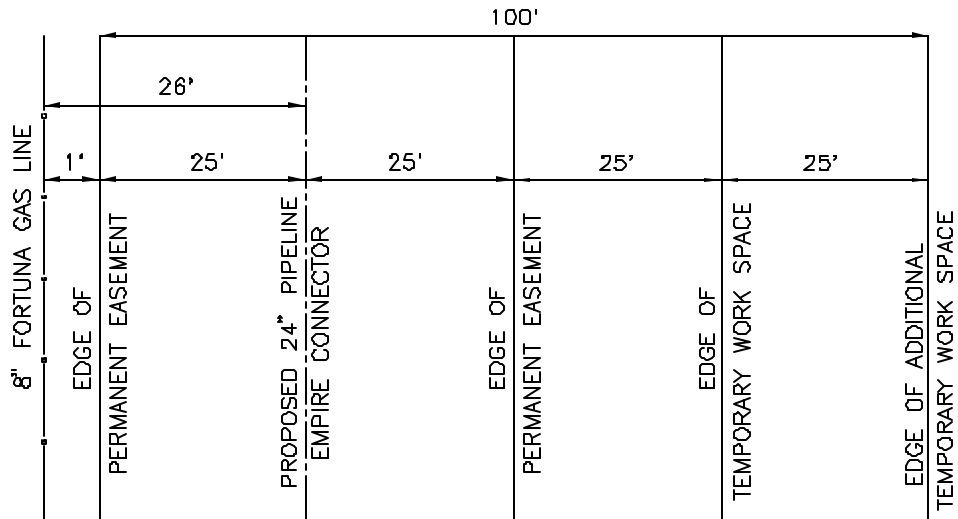


FIGURE 16

TYPICAL AGRICULTURAL R.O.W. ALONG EXISTING 8" FORTUNA PIPELINE


NOTE:

In Agricultural areas and as necessary, 25' of Additional Temporary Workspace width (not shown on these typicals) may be acquired in addition to the 100' shown here, as a contingency along construction Right-of-Way (R.O.W.).

Examples of when this may be necessary include, but are not limited to, the presence of highly saturated soils and areas where blasting is needed.

PUBLIC

DRAWN BY: Caler & Calantonia, Inc.	DATE: February 2005
CHECKED BY: Caler & Calantonia, Inc.	DATE: February 2005
APPROVED BY: Haley & Aldrich, Inc.	DATE:
APPROVED BY: Empire State Pipeline	DATE:

DRAWING NO.	TITLE	File No.: 8X11 ROW DETAIL.DWG
		EMPIRE STATE PIPELINE TYPICAL RIGHT OF WAY STATE OF NEW YORK
		 Empire Pipeline <small>A National Fuel Gas Company</small>
		FERC SUBMITTAL
		EMP-ROW-008

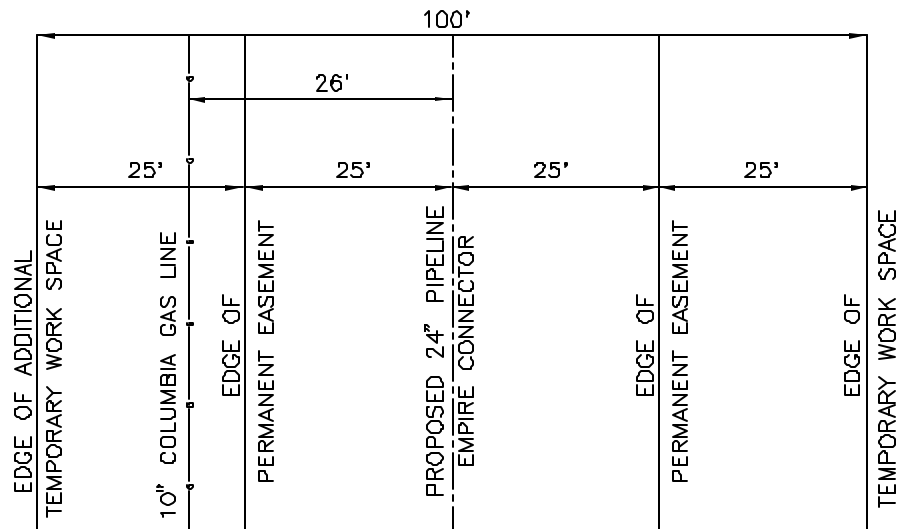


FIGURE 17

TYPICAL AGRICULTURAL R.O.W. ALONG EXISTING 10" COLUMBIA PIPELINE

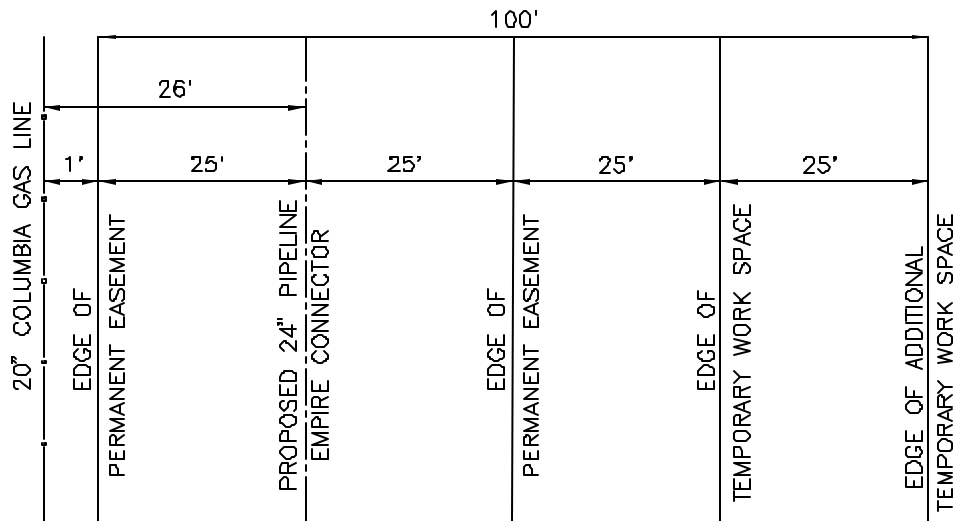


FIGURE 18

TYPICAL AGRICULTURAL R.O.W. ALONG EXISTING 20" COLUMBIA PIPELINE


NOTE:

In Agricultural areas and as necessary, 25' of Additional Temporary Workspace width (not shown on these typicals) may be acquired in addition to the 100' shown here, as a contingency along construction Right-of-Way (R.O.W.).

Examples of when this may be necessary include, but are not limited to, the presense of highly saturated soils and areas where blasting is needed.

PUBLIC

DRAWN BY: Caler & Calantonia, Inc.	DATE: February 2005
CHECKED BY: Caler & Calantonia, Inc.	DATE: February 2005
APPROVED BY: Haley & Aldrich, Inc.	DATE:
APPROVED BY: Empire State Pipeline	DATE:

DRAWING NO.	TITLE	File No.: 8X11 ROW DETAIL.DWG
		EMPIRE STATE PIPELINE TYPICAL RIGHT OF WAY STATE OF NEW YORK
		 Empire Pipeline <small>A National Fuel Gas Company</small>
		FERC SUBMITTAL
		EMP-ROW-009

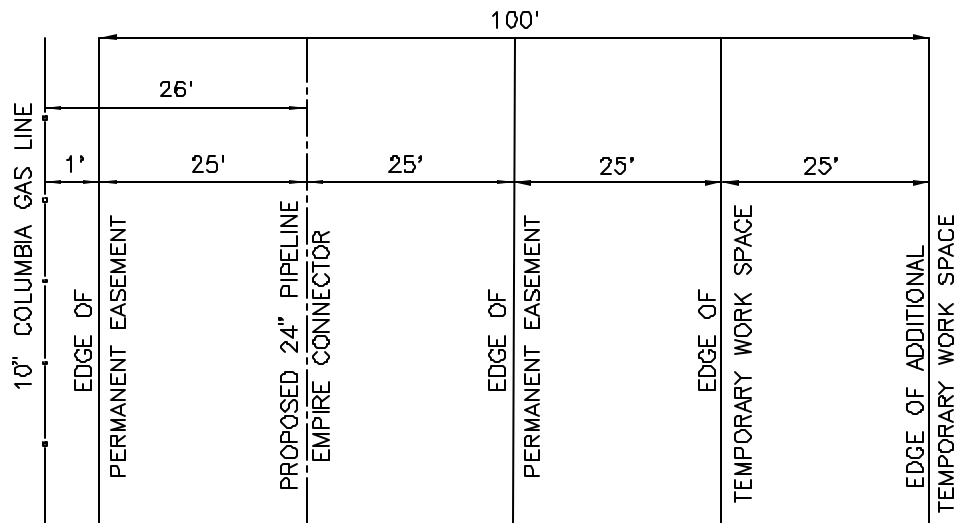


FIGURE 19

TYPICAL AGRICULTURAL R.O.W. ALONG EXISTING 10" COLUMBIA PIPELINE

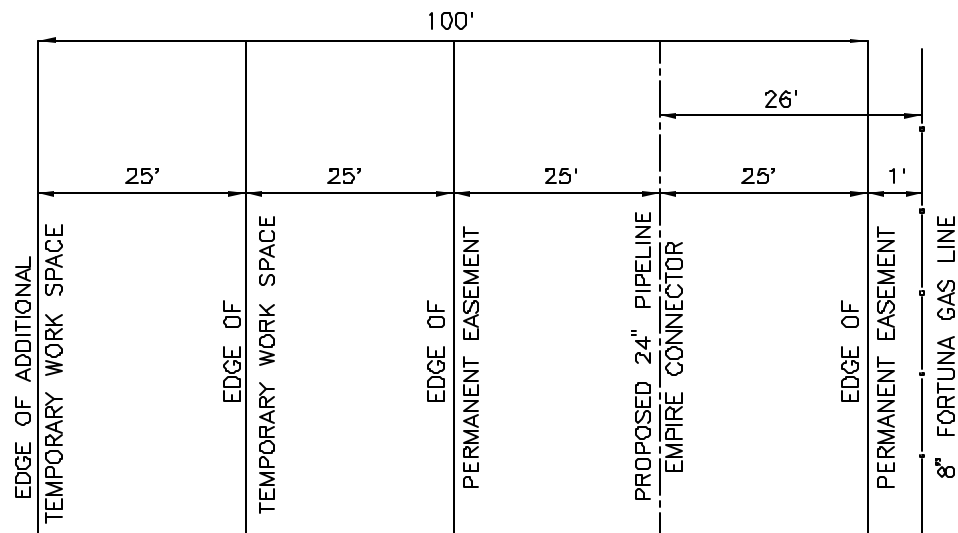


FIGURE 20

TYPICAL AGRICULTURAL R.O.W. ALONG EXISTING 8" FORTUNA PIPELINE


NOTE:

In Agricultural areas and as necessary, 25' of Additional Temporary Workspace width (not shown on these typicals) may be acquired in addition to the 100' shown here, as a contingency along construction Right-of-Way (R.O.W.).

Examples of when this may be necessary include, but are not limited to, the presense of highly saturated soils and areas where blasting is needed.

PUBLIC

DRAWN BY:	Caler & Calantonia, Inc.	DATE:	February 2005
CHECKED BY:	Caler & Calantonia, Inc.	DATE:	February 2005
APPROVED BY:	Haley & Aldrich, Inc.	DATE:	
APPROVED BY:	Empire State Pipeline	DATE:	

DRAWING NO.	TITLE	File No.: 8X11 ROW DETAIL.DWG
	EMPIRE STATE PIPELINE	
	TYPICAL RIGHT OF WAY	
		FERC SUBMITTAL
	STATE OF NEW YORK	EMP-ROW-010

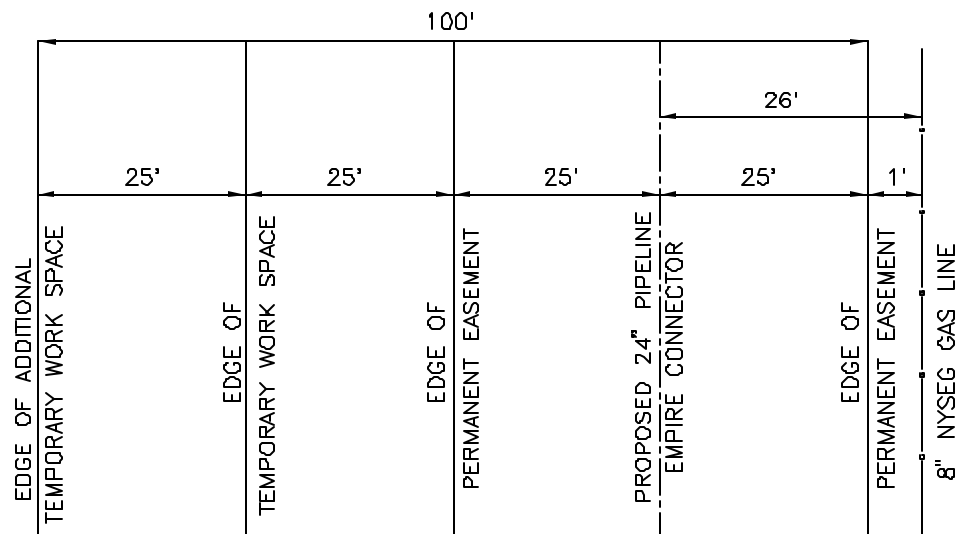


FIGURE 21

TYPICAL AGRICULTURAL R.O.W. ALONG EXISTING 8' NYSEG PIPELINE

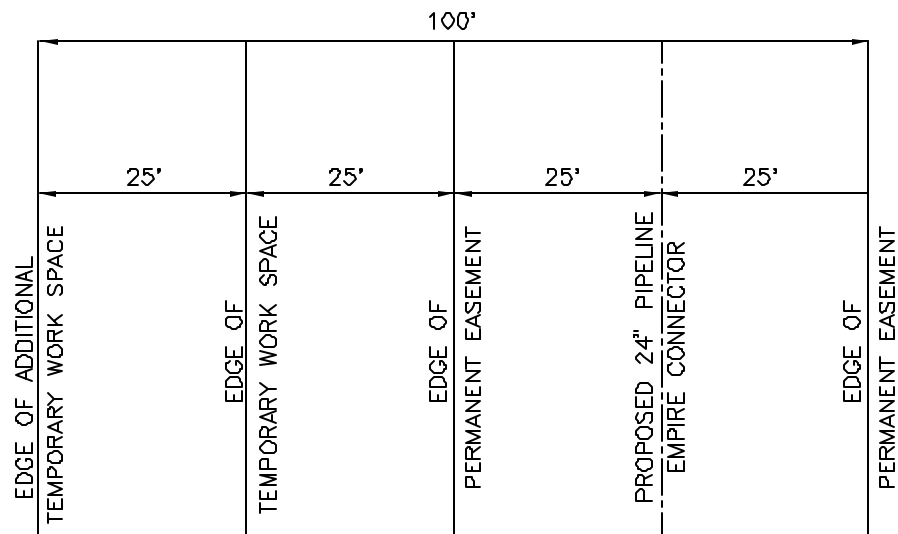


FIGURE 22

TYPICAL R.O.W. AT ROAD CROSSINGS


NOTE:

In Agricultural areas and as necessary, 25' of Additional Temporary Workspace width (not shown on these typicals) may be acquired in addition to the 100' shown here, as a contingency along construction Right-of-Way (R.O.W.).

Examples of when this may be necessary include, but are not limited to, the presence of highly saturated soils and areas where blasting is needed.

PUBLIC

DRAWN BY: Caler & Calantonia, Inc.	DATE: February 2005
CHECKED BY: Caler & Calantonia, Inc.	DATE: February 2005
APPROVED BY: Haley & Aldrich, Inc.	DATE:
APPROVED BY: Empire State Pipeline	DATE:

DRAWING NO.	TITLE	File No.: 8X11 ROW DETAIL.DWG
		<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> EMPIRE STATE PIPELINE TYPICAL RIGHT OF WAY STATE OF NEW YORK </div> <div style="text-align: center;">  Empire Pipeline <small>A National Fuel Gas Company</small> </div> </div> <div style="text-align: center; border: 1px solid black; padding: 5px; margin-top: 10px;"> FERC SUBMITTAL </div> <div style="text-align: center; border: 1px solid black; padding: 10px; margin-top: 10px;"> EMP-ROW-011 </div>

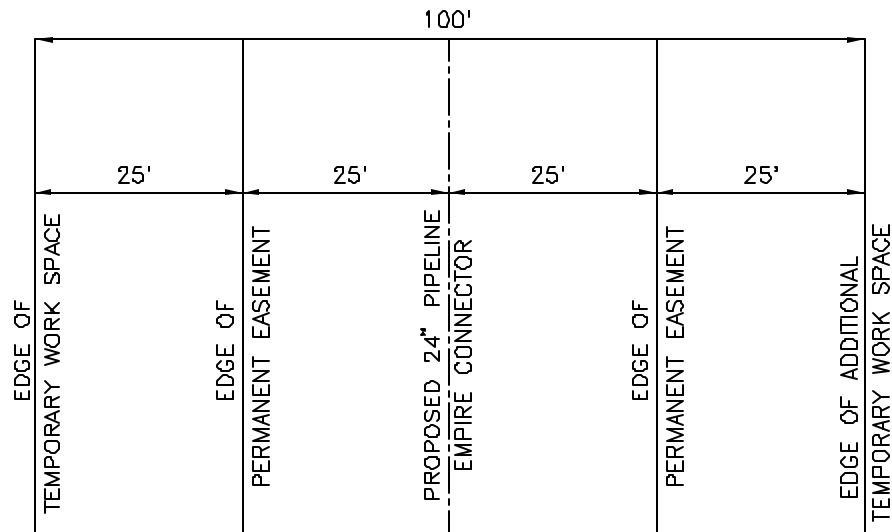


FIGURE 23
TYPICAL R.O.W. AT ROAD CROSSINGS

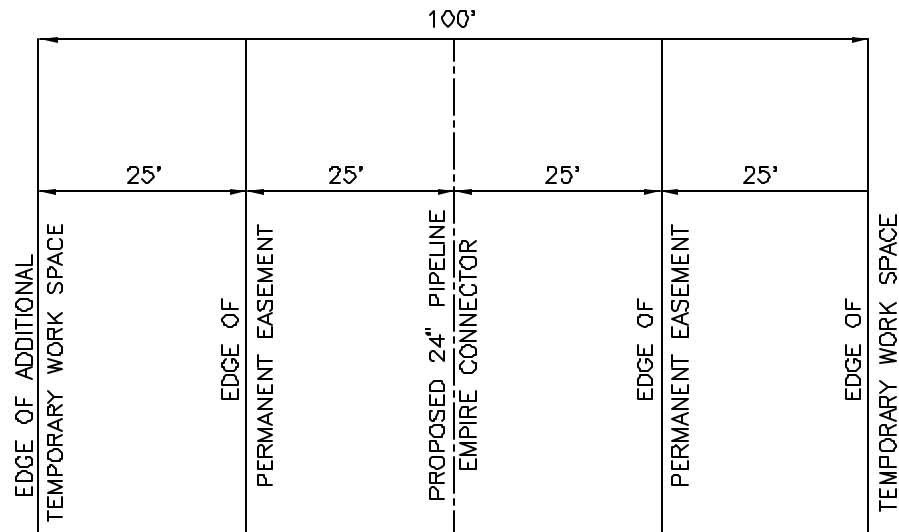


FIGURE 24
TYPICAL R.O.W. AT ROAD CROSSINGS

NOTE:

In Agricultural areas and as necessary, 25' of Additional Temporary Workspace width (not shown on these typicals) may be acquired in addition to the 100' shown here, as a contingency along construction Right-of-Way (R.O.W.).

Examples of when this may be necessary include, but are not limited to, the presence of highly saturated soils and areas where blasting is needed.

PUBLIC

DRAWN BY: Caler & Calantonia, Inc.	DATE: February 2005
CHECKED BY: Caler & Calantonia, Inc.	DATE: February 2005
APPROVED BY: Haley & Aldrich, Inc.	DATE:
APPROVED BY: Empire State Pipeline	DATE:

DRAWING NO.	TITLE	File No.: 8X11 ROW DETAIL.DWG
		EMPIRE STATE PIPELINE
		TYPICAL RIGHT OF WAY
		STATE OF NEW YORK
		EMP-ROW-012



FERC SUBMITTAL

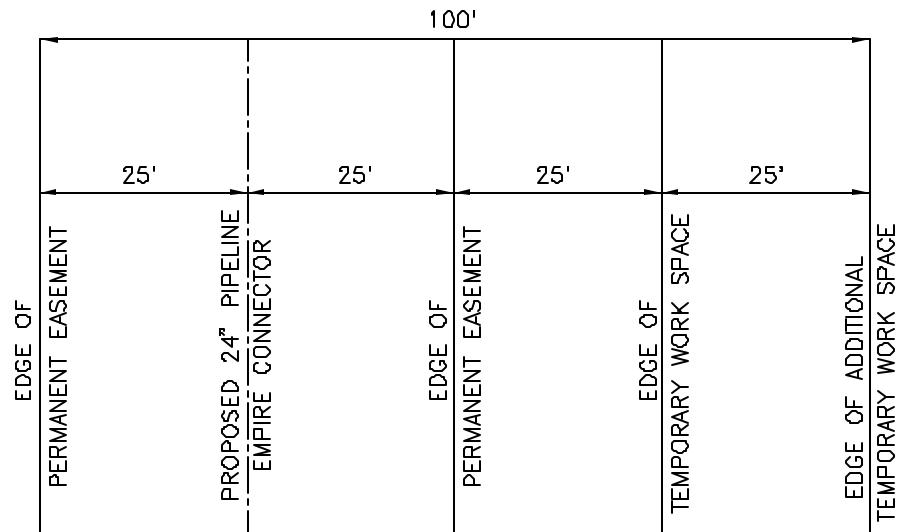


FIGURE 25
TYPICAL R.O.W. AT ROAD CROSSINGS

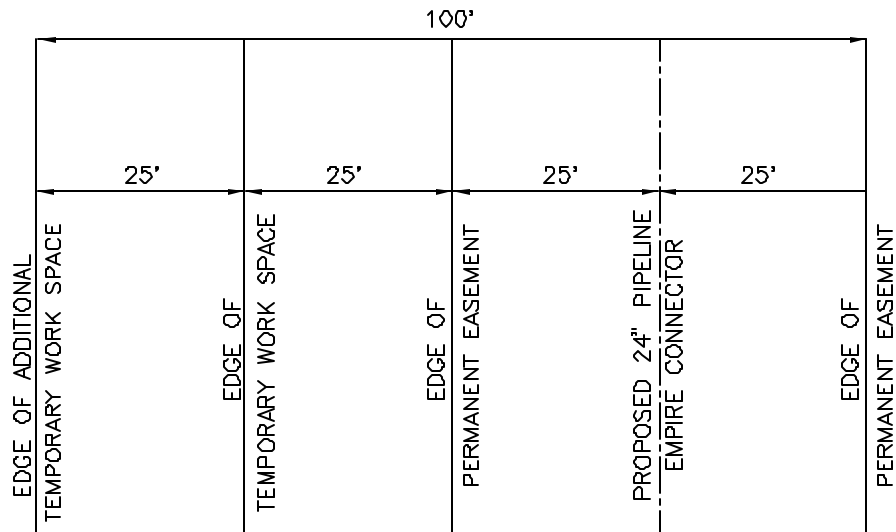


FIGURE 26
TYPICAL R.O.W. AT STREAM CROSSINGS

NOTE:

In Agricultural areas and as necessary, 25' of Additional Temporary Workspace width (not shown on these typicals) may be acquired in addition to the 100' shown here, as a contingency along construction Right-of-Way (R.O.W.).

Examples of when this may be necessary include, but are not limited to, the presence of highly saturated soils and areas where blasting is needed.

PUBLIC

DRAWN BY: Caler & Calantonia, Inc.	DATE: February 2005
CHECKED BY: Caler & Calantonia, Inc.	DATE: February 2005
APPROVED BY: Haley & Aldrich, Inc.	DATE:
APPROVED BY: Empire State Pipeline	DATE:

DRAWING NO.	TITLE	File No.: 8X11 ROW DETAIL.DWG
		EMPIRE STATE PIPELINE
		TYPICAL RIGHT OF WAY
		STATE OF NEW YORK
		EMP-ROW-013



FERC SUBMITTAL

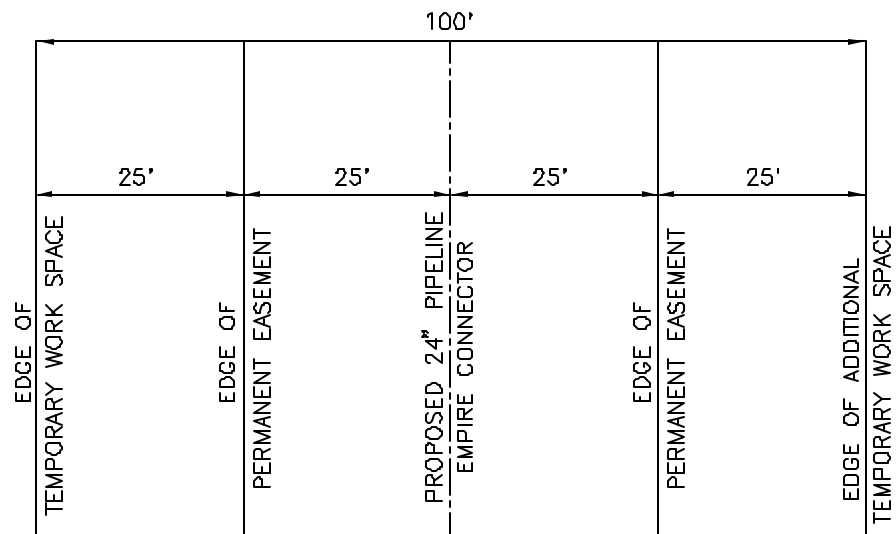


FIGURE 27
TYPICAL R.O.W. AT STREAM CROSSINGS

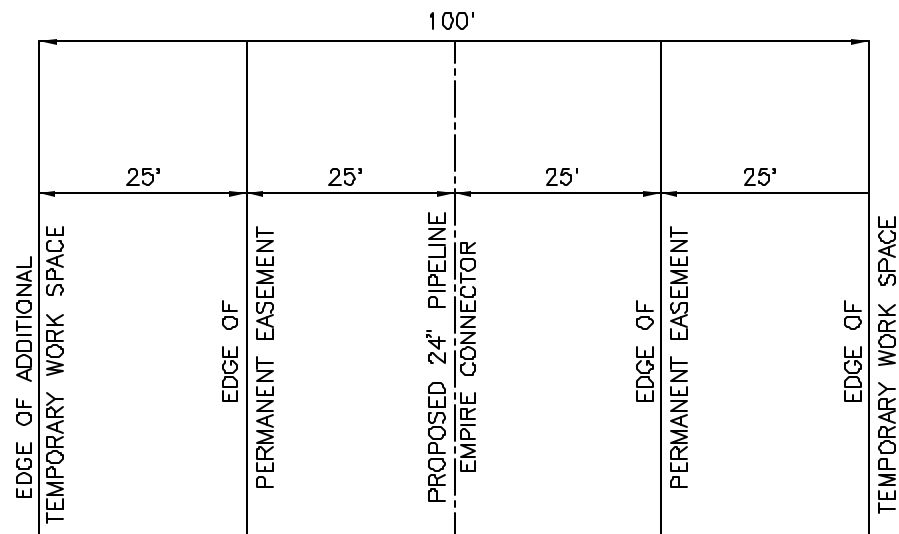


FIGURE 28
TYPICAL R.O.W. AT STREAM CROSSINGS

NOTE:

In Agricultural areas and as necessary, 25' of Additional Temporary Workspace width (not shown on these typicals) may be acquired in addition to the 100' shown here, as a contingency along construction Right-of-Way (R.O.W.).

Examples of when this may be necessary include, but are not limited to, the presence of highly saturated soils and areas where blasting is needed.

PUBLIC

DRAWN BY: Caler & Calantonia, Inc.	DATE: February 2005
CHECKED BY: Caler & Calantonia, Inc.	DATE: February 2005
APPROVED BY: Haley & Aldrich, Inc.	DATE:
APPROVED BY: Empire State Pipeline	DATE:

DRAWING NO.	TITLE	File No.: 8X11 ROW DETAIL.DWG
		EMPIRE STATE PIPELINE
		TYPICAL RIGHT OF WAY
		STATE OF NEW YORK
		EMP-ROW-014



FERC SUBMITTAL

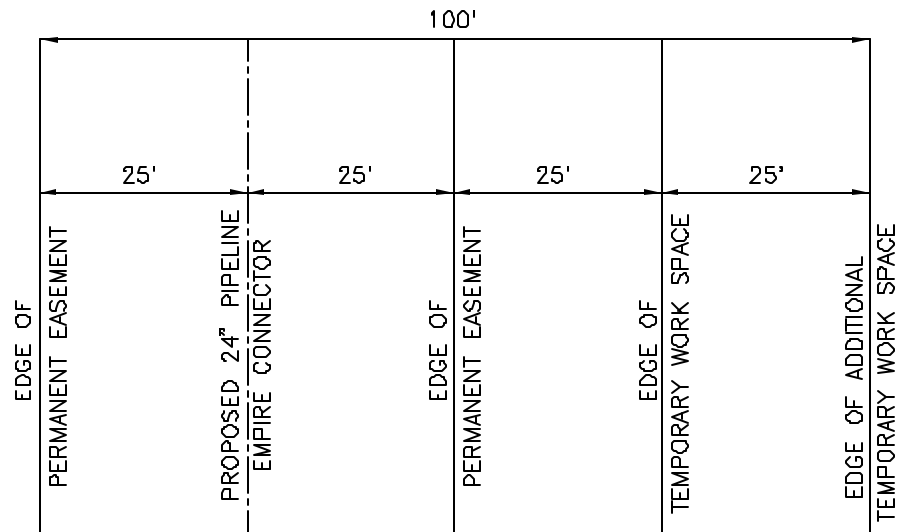


FIGURE 29
TYPICAL R.O.W. AT STREAM CROSSINGS

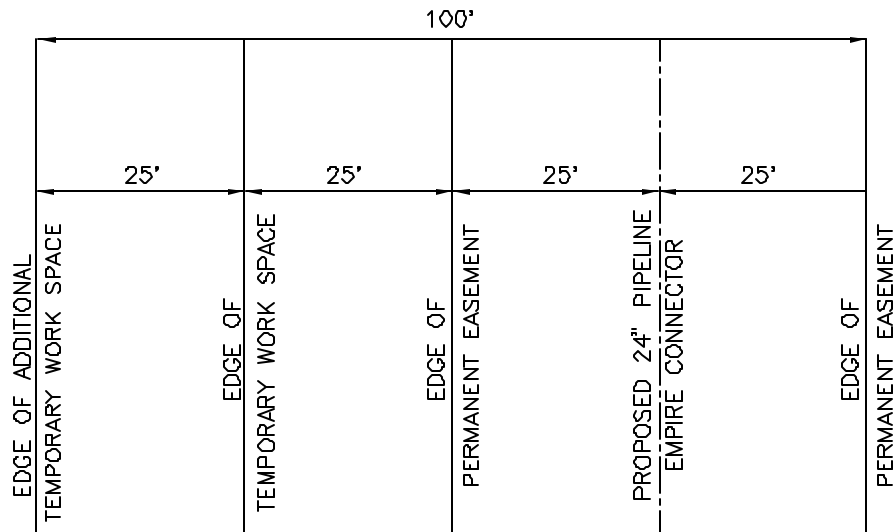


FIGURE 30
TYPICAL R.O.W. AT RAILROAD CROSSINGS

NOTE:

In Agricultural areas and as necessary, 25' of Additional Temporary Workspace width (not shown on these typicals) may be acquired in addition to the 100' shown here, as a contingency along construction Right-of-Way (R.O.W.).

Examples of when this may be necessary include, but are not limited to, the presence of highly saturated soils and areas where blasting is needed.

PUBLIC

DRAWN BY: Caler & Calantonia, Inc.	DATE: February 2005
CHECKED BY: Caler & Calantonia, Inc.	DATE: February 2005
APPROVED BY: Haley & Aldrich, Inc.	DATE:
APPROVED BY: Empire State Pipeline	DATE:

DRAWING NO.	TITLE	File No.: 8X11 ROW DETAIL.DWG
		EMPIRE STATE PIPELINE
		TYPICAL RIGHT OF WAY
		STATE OF NEW YORK
		EMP-ROW-015



FERC SUBMITTAL

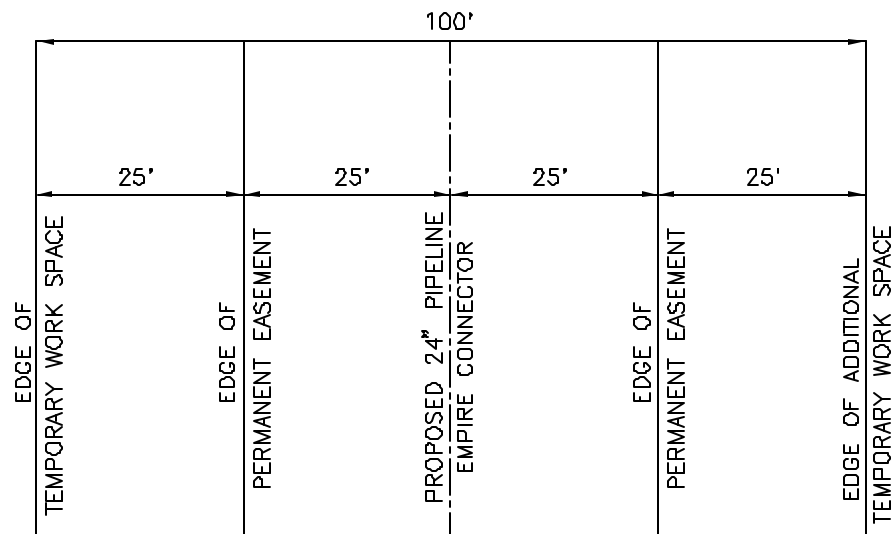


FIGURE 31
TYPICAL R.O.W. AT RAILROAD CROSSINGS

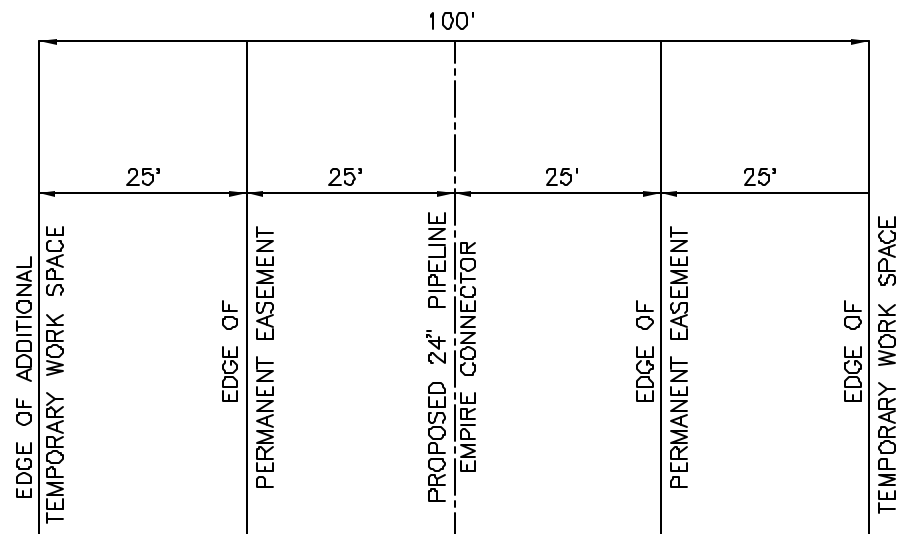


FIGURE 32
TYPICAL R.O.W. AT RAILROAD CROSSINGS

NOTE:

In Agricultural areas and as necessary, 25' of Additional Temporary Workspace width (not shown on these typicals) may be acquired in addition to the 100' shown here, as a contingency along construction Right-of-Way (R.O.W.).

Examples of when this may be necessary include, but are not limited to, the presence of highly saturated soils and areas where blasting is needed.

PUBLIC

DRAWN BY: Caler & Calantonia, Inc.	DATE: February 2005
CHECKED BY: Caler & Calantonia, Inc.	DATE: February 2005
APPROVED BY: Haley & Aldrich, Inc.	DATE:
APPROVED BY: Empire State Pipeline	DATE:

DRAWING NO.	TITLE	File No.: 8X11 ROW DETAIL.DWG
		EMPIRE STATE PIPELINE
		TYPICAL RIGHT OF WAY
		STATE OF NEW YORK
		EMP-ROW-016
		FERC SUBMITTAL



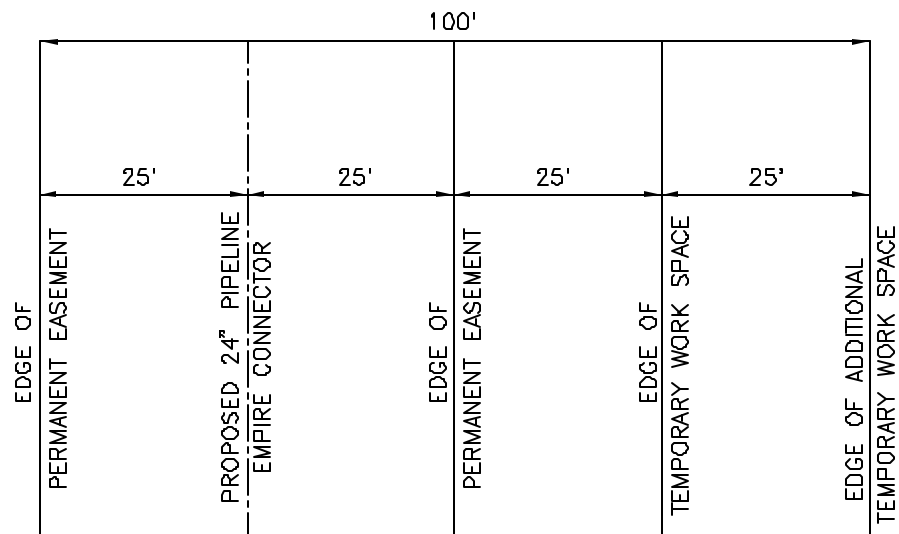


FIGURE 33
TYPICAL R.O.W. AT RAILROAD CROSSINGS


NOTE:

In Agricultural areas and as necessary, 25' of Additional Temporary Workspace width (not shown on these typicals) may be acquired in addition to the 100' shown here, as a contingency along construction Right-of-Way (R.O.W.). Examples of when this may be necessary include, but are not limited to, the presense of highly saturated soils and areas where blasting is needed.

PUBLIC

DRAWN BY: Caler & Calantonia, Inc.	DATE: February 2005
CHECKED BY: Caler & Calantonia, Inc.	DATE: February 2005
APPROVED BY: Haley & Aldrich, Inc.	DATE:
APPROVED BY: Empire State Pipeline	DATE:

DRAWING NO.	TITLE	File No.: 8X11 ROW DETAIL.DWG
		EMPIRE STATE PIPELINE
		TYPICAL RIGHT OF WAY
		STATE OF NEW YORK
		EMP-ROW-017

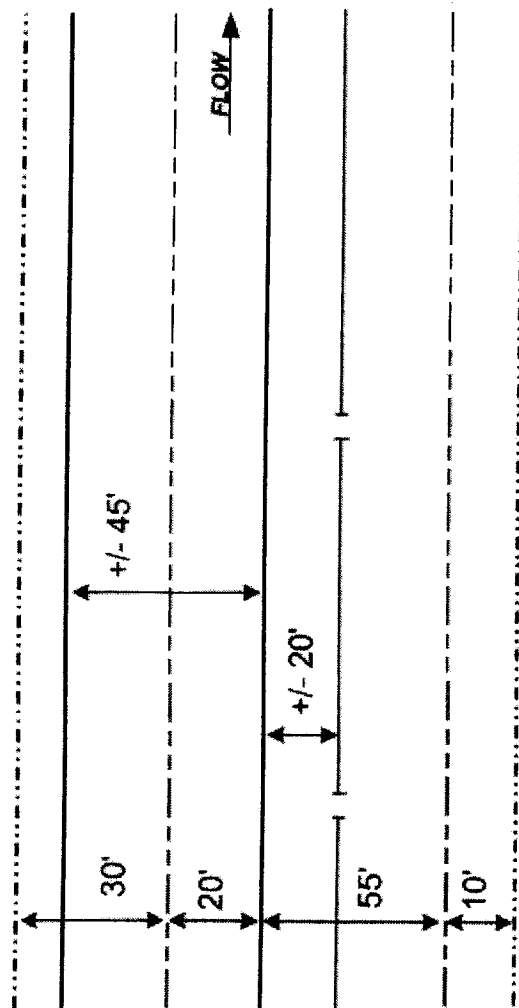

Empire Pipeline
A National Fuel Gas Company

FERC SUBMITTAL

Appendix C3

Algonquin Typical ROW Cross Sections

AGT TEMPORARY RW (COLUMBIA GAS RW)
 EXISTING 24" COLUMBIA PIPELINE
 AGT PERMANENT RW & COLUMBIA GAS RW
 PROPOSED 42" REPLACEMENT CL
 EXISTING AGT 30" LOOP LINE
 AGT PERMANENT RW
 AGT TEMPORARY RW



MP 0.00 TO 0.29



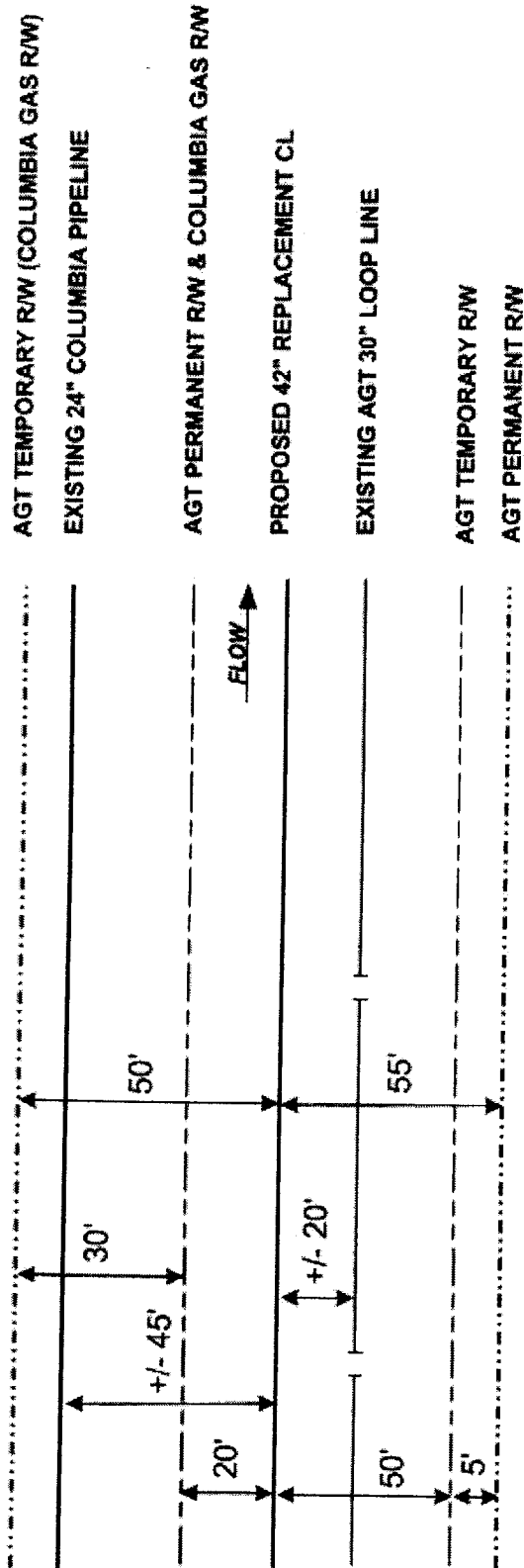
LEGEND

--- AGT PERM ROW
 ... AGT TEMP ROW
 — PIPELINE
 —+— AGT 30" LOOP LINE

ALGONQUIN GAS TRANSMISSION CO. PROPOSED RAMAPO EXPANSION CONFIGURATION NO. 1

REV	REV DATE	ENG	DATE	REV APPR'D.
OK'D BY	K.J.A.	K.J.A.	12/01/05	W O 004170028
DRN BY	J.M.F.	SCALE	NONE	DWG NO
				RAMAPO-01

Duke Energy
Gas Transmission
A Duke Energy Company



MP 0.29 TO 0.49

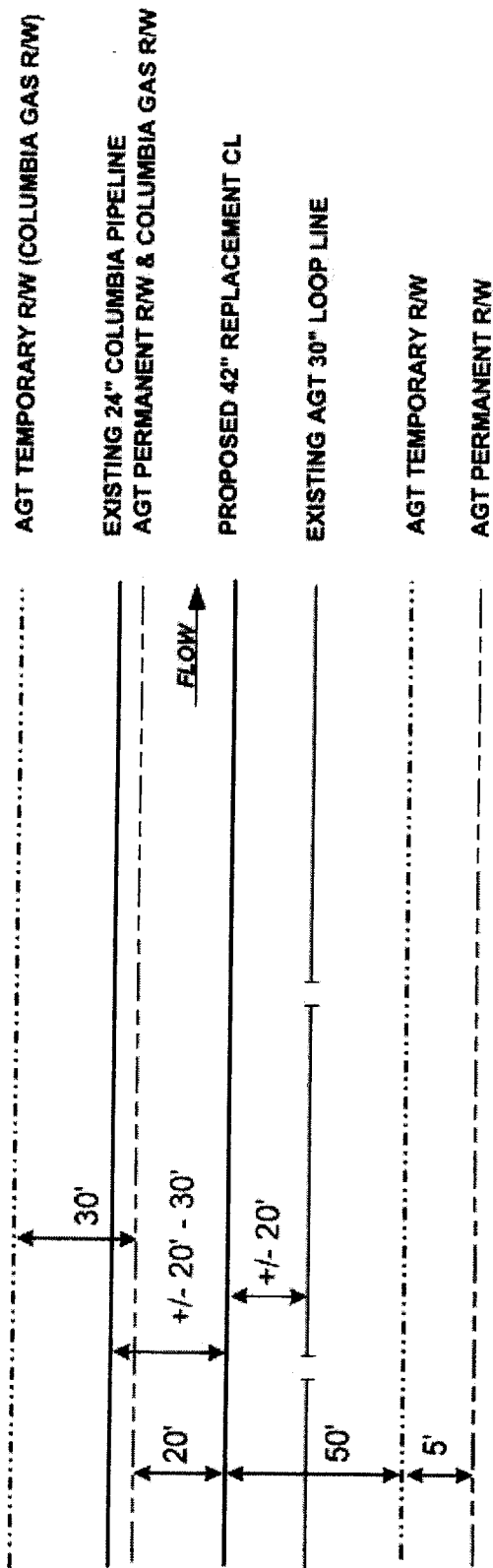
**LEGEND**

- AGT PERM ROW
- - - - - AGT TEMP ROW
- _____ PIPELINE
- AGT 30" LOOP LINE

ALGONQUIN GAS TRANSMISSION CO.
PROPOSED RAMAPO EAST EXPANSION
CONFIGURATION NO.2

REV	REV. DATE	REV. APPROV.
CHKD BY K.J.A.	ENG. K.J.A.	DATE 12/01/05
DRN BY J.M.F.	SCALE NONE	DWS NO 004170028
		RAMAPO-02

Duke Energy
Gas Transmission
A Duke Energy Company



MP 0.49 TO 0.62



LEGEND

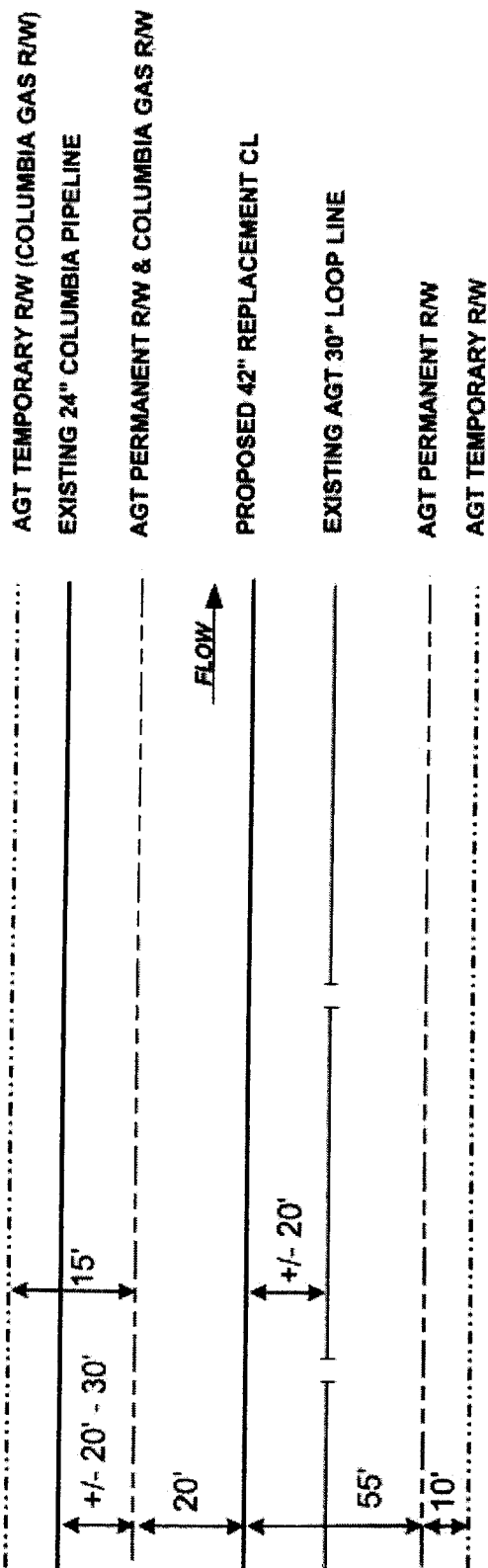
- AGT PERM ROW
- - - - - AGT TEMP ROW
- ===== PIPELINE
- AGT 30" LOOP LINE

ALGONQUIN GAS TRANSMISSION CO.

PROPOSED RAMAPO EAST EXPANSION
CONFIGURATION NO. 3

REV	REV DATE	REV APPRD.
CHKD BY K.J.A.	ENG. K.J.A.	DATE 12/01/05
DRN BY J.M.F.	SCALE NONE	DWG NO 004170028
RAMAPO-03		





MP 0.62 TO 1.45

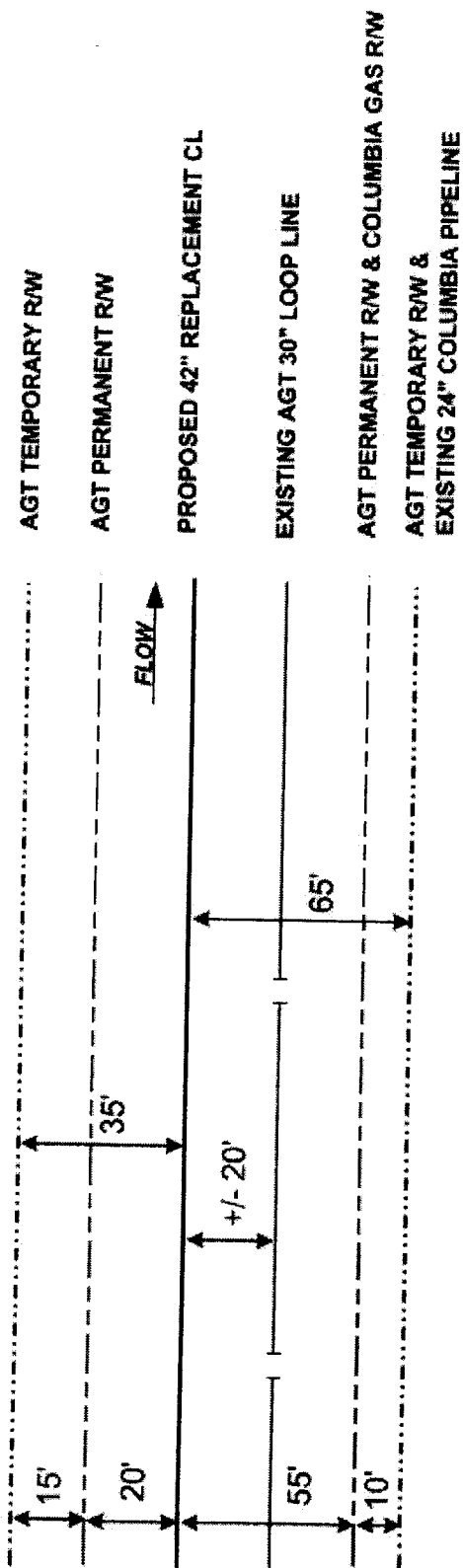
**LEGEND**

---	AGT PERM ROW
----	AGT TEMP ROW
=====	PIPELINE
— —	AGT 30" LOOP LINE

ALGONQUIN GAS TRANSMISSION CO.
PROPOSED RAMAPO EAST EXPANSION
CONFIGURATION NO. 4

REV	REV. DATE	REV. APPROV.	DATE	W.O.
CHKD BY	K.J.A.	ENR	12/01/05	004170028
DRN BY	J.M.F.	SCALE	NONE	DWG NO.
				RAMAPO-04

Duke Energy
Gas Transmission
A Duke Energy Company



MP 1.45 TO 2.00



LEGEND

AGT PERM ROW

AGT TEMP FROM

PIPELINE

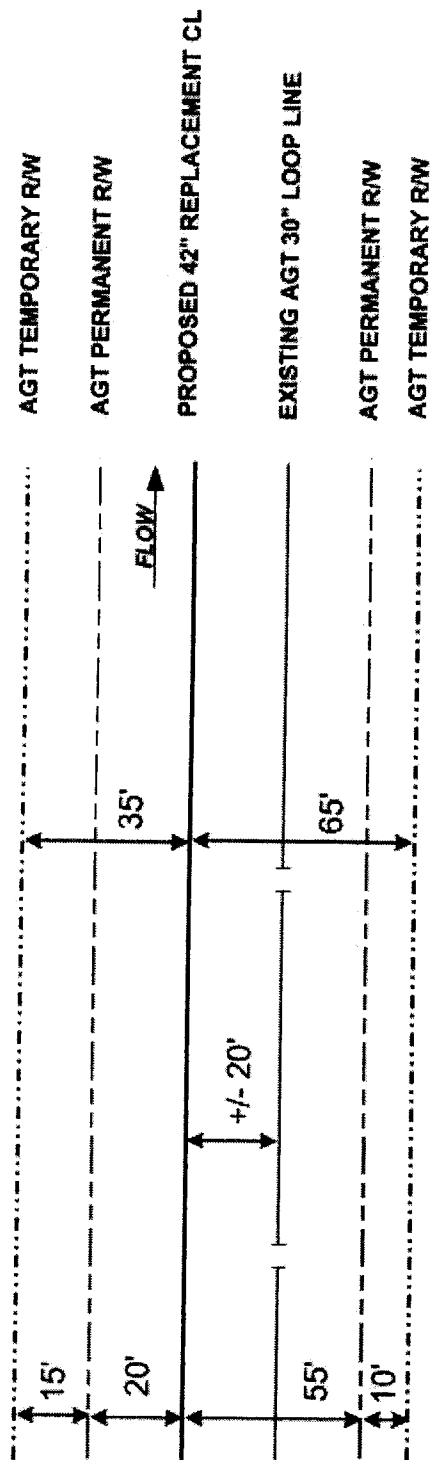
AGT 30' LOOP LINE

ALGONQUIN GAS TRANSMISSION CO.
PROPOSED RAMAPO EAST EXPANSION
CONFIGURATION NO. 5

REV	REV. DATE	ENG.	DATE	REV. APPROV.D.
CHKD BY	K.J.A.	K.J.A.	12/01/05	W O 004170028
DRN BY	J.M.F.	SCALE	DWG NO	
		NONE		RAMAPO-05



**Duke Energy
Gas Transmission**
A Duke Energy Company



MP 2.00 TO 2.39
4.10 TO 4.66



LEGEND

- AGT PERM ROW
- - - - - AGT TEMP ROW
- _____ PIPELINE
- AGT 30" LOOP LINE

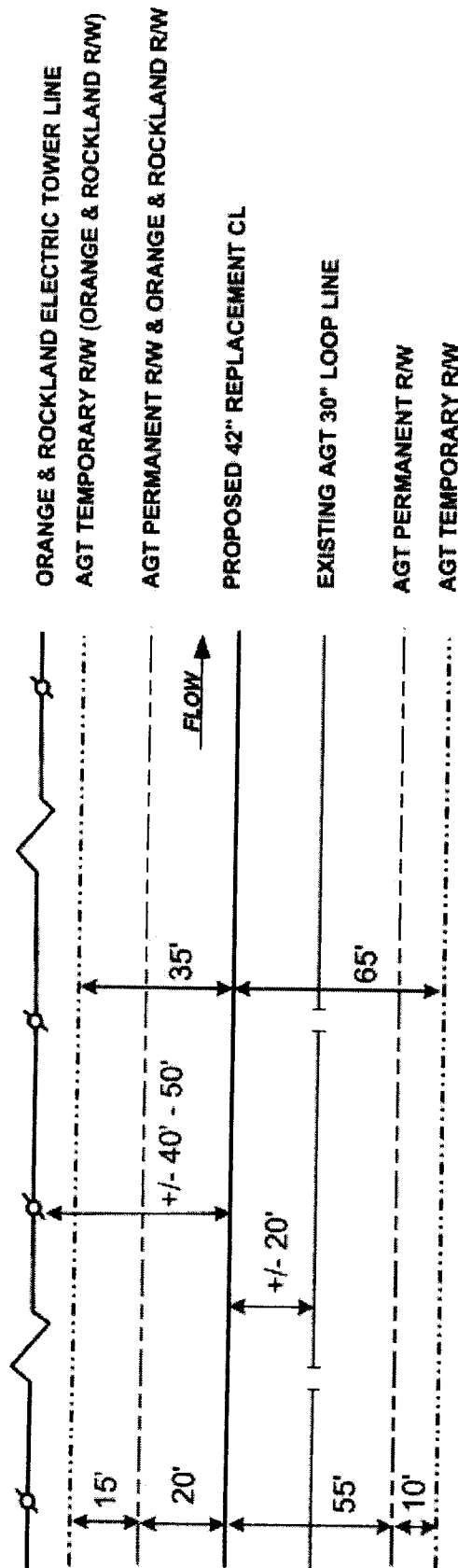
ALGONQUIN GAS TRANSMISSION CO.
PROPOSED RAMAPO EAST EXPANSION
CONFIGURATION NO. 6

REV	REV. DATE	ENG	DATE	W.O.	REV. APPR'D.
CHKD BY	K.J.A.	K.J.A.	12/01/05	004170028	
DRN BY	J.M.F.	SCALE	NONE	DWG NO	RAMAPO-06



NOTE: ADDITIONAL "NEW" PERMANENT R/W WILL BE REQUIRED AT THE REMOTE BLOW-OFF @ MP 4.8

NOTE: LIMITED "NEW" PERMANENT R/W WILL BE REQUIRED TO ELIMINATE THE PIPELINE CROSSOVER @ MP 4.1



MP 2.39 TO 4.10
4.66 TO 4.93



LEGEND

AGT PERM ROW

AGT TEMP ROW

PIPELINE

AGT 30" LOOP LINE

ORANGE & ROCKLAND
ELECTRIC TOWER LINE

ALGONQUIN GAS TRANSMISSION CO.

PROPOSED RAMAPO EAST EXPANSION CONFIGURATION NO. 7

REV	REV. DATE	REV. APPR'D.
CVD BY	K.J.A.	ENG K.J.A.
DATE	12/01/05	W/O 004170028
DRN BY	J.M.F.	SCALE NONE
DWG NO		RAMAPO-07

Duke Energy
Gas Transmission
A Duke Energy Company

Appendix C4

Iroquois Typical ROW Cross Sections (Not Applicable)